

## General

### Title

Asthma: percentage of members 5 to 50 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.

### Source(s)

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. various p.

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. various p.

## Measure Domain

### Primary Measure Domain

#### Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of enrolled members 5 to 50 years of age during the measurement year who were identified as having persistent asthma and who were appropriately prescribed medication during the measurement year.

This process measure evaluates whether members with persistent asthma are being prescribed

medications that are acceptable as primary therapy for long-term asthma control. The list of acceptable medications is derived from the National Heart, Lung, and Blood Institute (NHLBI) National Asthma Education Prevention Program (NAEPP) guidelines.

## Rationale

Asthma is one of the nation's most costly and high-impact diseases. It has become increasingly common over the past two decades. Approximately 34.1 million Americans have been diagnosed with asthma and each year nearly 5,000 Americans die of it. Many asthma-related deaths, hospitalizations, emergency room visits and missed work and school days could be avoided if patients had appropriate medications and medical management. Medications help reduce underlying airway inflammation and relieve or prevent airway narrowing.

## Primary Clinical Component

Asthma; antiasthmatic combinations; antibody inhibitor; inhaled steroid combinations; inhaled corticosteroids; leukotriene modifiers; mast cell stabilizers; methylxanthines

## Denominator Description

Health plan members 5 to 50 years of age by December 31 of the measurement year with persistent asthma (see the related "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields)

## Numerator Description

Dispensed at least one prescription for a preferred therapy during the measurement year (refer to Table ASM-D in the original measure documentation for a list of preferred asthma therapy medications) (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Evidence Supporting the Criterion of Quality

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Evidence Supporting Need for the Measure

### Need for the Measure

Use of this measure to improve performance

Variation in quality for the performance measured

## Evidence Supporting Need for the Measure

National Committee for Quality Assurance (NCQA). The state of health care quality: reform, the quality agenda and resource use. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. 160 p.

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

Accreditation

Decision-making by businesses about health-plan purchasing

Decision-making by consumers about health plan/provider choice

External oversight/Medicaid

External oversight/State government program

Internal quality improvement

National reporting

## Application of Measure in its Current Use

### Care Setting

Managed Care Plans

### Professionals Responsible for Health Care

Measure is not provider specific

### Lowest Level of Health Care Delivery Addressed

Single Health Care Delivery Organizations

### Target Population Age

Age 5 to 50 years

### Target Population Gender

Either male or female

## Stratification by Vulnerable Populations

Data are stratified by age, including children (5 to 11 years).

## Characteristics of the Primary Clinical Component

### Incidence/Prevalence

See the "Rationale" field.

### Association with Vulnerable Populations

Unspecified

### Burden of Illness

See the "Rationale" field.

### Utilization

- In 2006, 1.7 million emergency department visits were attributed to asthma.
- A 45 percent reduction in the risk of repeat emergency department visits has been shown in patients using inhaled corticosteroid treatment.

### Evidence for Utilization

Akinbami LJ, Moorman JE, Garbe PL, Sondik EJ. Status of childhood asthma in the United States, 1980-2007. *Pediatrics*. 2009 Mar;123 Suppl:S131-45. [PubMed](#)

Asthma in adults fact sheet. [internet]. Washington (DC): American Lung Association; 2010 Feb [accessed 2011 Feb 18].

### Costs

- The annual economic cost of asthma is \$20.7 billion. Direct costs, including prescriptions, make up \$15.6 billion of that total, and indirect costs such as lost productivity add another \$5.1 billion.
- Among children 5 to 17 years of age, asthma is the leading cause of school absences, accounting for an annual loss of more than 14 million school days.
- Asthma is the cause of an estimated 14.2 million lost workdays for adults.

See also the "Rationale" field.

### Evidence for Costs

Akinbami LJ, Moorman JE, Garbe PL, Sondik EJ. Status of childhood asthma in the United States, 1980-2007. *Pediatrics*. 2009 Mar;123 Suppl:S131-45. [PubMed](#)

# Institute of Medicine (IOM) Healthcare Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

## Data Collection for the Measure

### Case Finding

Users of care only

### Description of Case Finding

Health plan members 5 to 50 years of age by December 31 of the measurement year with persistent asthma who were continuously enrolled during the measurement year and the year prior to the measurement year\*

*\*Allowable Gap:* No more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment (commercial). To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage.

### Denominator Sampling Frame

Patients associated with provider

### Denominator Inclusions/Exclusions

#### Inclusions

Health plan members 5 to 50 years of age by December 31 of the measurement year with persistent asthma\*

*\*Persistent asthma:* Refer to the original measure documentation for steps to identify members with persistent asthma.

#### Exclusions

(Optional) Members diagnosed with emphysema or chronic obstructive pulmonary disease (COPD), cystic fibrosis or acute respiratory failure (refer to Table ASM-E in the original measure documentation for codes to identify exclusions) on or prior to December 31 of the measurement year.

### Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

## Denominator (Index) Event

Clinical Condition

Encounter

Institutionalization

Patient Characteristic

Therapeutic Intervention

## Denominator Time Window

Time window precedes index event

## Numerator Inclusions/Exclusions

Inclusions

Dispensed\* at least one prescription for a preferred therapy during the measurement year (refer to Table ASM-D in the original measure documentation for a list of preferred asthma therapy medications)

\*Note:

*Oral medication dispensing event:* One prescription of an amount lasting 30 days or less. To calculate dispensing events for prescriptions longer than 30 days, divide the days supply by 30 and round down to convert. The organization should allocate the dispensing events to the appropriate year based on the date on which the prescription is filled.

*Multiple prescriptions dispensed on the same day:* Multiple prescriptions for different medications dispensed on the same day should be assessed separately. If multiple prescriptions for the same medication are dispensed on the same day, the organization should sum the days supply and divide by 30.

*Inhaler/injection dispensing event:* Inhalers and injections count as one dispensing event. In addition, multiple inhalers or injections of the same medication filled on the same date of service should be counted as one dispensing event. The organization should allocate the dispensing events to the appropriate year based on the date on which the prescription is filled.

Refer to the original measure documentation for additional details.

Exclusions

Unspecified

## Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## Numerator Time Window

Fixed time period

## Data Source

Administrative data

Pharmacy data

## Level of Determination of Quality

Individual Case

## Pre-existing Instrument Used

Unspecified

## Computation of the Measure

### Scoring

Rate

### Interpretation of Score

Better quality is associated with a higher score

### Allowance for Patient Factors

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

### Description of Allowance for Patient Factors

This measure requires that separate rates be reported for Medicaid and commercial product lines.

For each product line, the measure should be reported for each of two age stratifications (based on age as of December 31 of the measurement year) and as an overall rate:

5 to 11 years  
12 to 50 years  
Total

The total is the sum of the two age stratifications.

### Standard of Comparison

External comparison at a point in time

External comparison of time trends

Internal time comparison

## Evaluation of Measure Properties

### Extent of Measure Testing

Unspecified

## Identifying Information

### Original Title

Use of appropriate medications for people with asthma (ASM).

## Measure Collection Name

HEDIS® 2011: Healthcare Effectiveness Data & Information Set

## Measure Set Name

Effectiveness of Care

## Measure Subset Name

Respiratory Conditions

## Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

## Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

## Funding Source(s)

Unspecified

## Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

## Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

## Endorser

National Quality Forum - None

## Included in

Ambulatory Care Quality Alliance

National Healthcare Disparities Report (NHDR)



## Adaptation

Measure was not adapted from another source.

## Release Date

2000 Jan

## Revision Date

2010 Jul

## Measure Status

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

## Source(s)

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. various p.

National Committee for Quality Assurance (NCQA). HEDIS® 2011: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. various p.

## Measure Availability

The individual measure, "Use of Appropriate Medications for People with Asthma (ASM)," is published in "HEDIS® 2011. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site:

[www.ncqa.org](http://www.ncqa.org) .

## Companion Documents

The following is available:

National Committee for Quality Assurance (NCQA). The state of health care quality: reform, the quality agenda and resource use. Washington (DC): National Committee for Quality Assurance (NCQA); 2010. 160 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site:

## NQMC Status

This NQMC summary was completed by ECRI on July 18, 2003. The information was verified by the measure developer on August 29, 2003. This NQMC summary was updated by ECRI on March 23, 2005 and again on September 29, 2005. The information was verified by the measure developer on December 2, 2005. This NQMC summary was updated by ECRI on January 31, 2007. The updated information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on November 15, 2007. The information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on March 10, 2009. The information was verified by the measure developer on May 29, 2009. This NQMC summary was updated again by ECRI Institute on January 15, 2010 and February 16, 2011.

## Copyright Statement

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For detailed specifications regarding the National Committee on Quality Assurance (NCQA) measures, refer to *HEDIS Volume 2: Technical Specifications*, available from the NCQA Web site at [www.ncqa.org](http://www.ncqa.org) .

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